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7/1/94 | Anita Kuhl

Date | Name

#549  
08-24-94

PATENT  
19603/230

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : E. Falck-Pedersen  
Serial No : 08/166,925  
Filed: : 12/14/93  
For : ADENOVIRUS GENE EXPRESSION  
SYSTEM

Examiner:  
Unknown

Art Unit:  
1804

RECEIVED

JUL 11 1994

GROUP 1800

### INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

Dear Sir:

Pursuant to 37 CFR §§ 1.97-1.98, Applicant hereby brings to the attention of the United States Patent and Trademark Office, the references listed on the attached PTO-1449 form.

CITED REFERENCES

Reference AA, U.S. Patent 4,745,051 to Smith, et al., relates to a method for incorporating a selected gene coupled with a baculovirus polyhedrin promoter into a baculovirus genome to produce a recombinant baculovirus expression vector capable of expression of the selected gene in a host insect cell.

Reference AB, U.S. Patent 4,963,481 to deVilliers, relates to recombinant DNA molecules which contain a nucleotide sequence encoding a mouse cytomegalovirus-derived transcriptional promoter.

Reference AC, U.S. Patent 5,075,224 to Seeburg, et al., relates to DNA encoding a polypeptide hormone, designated CTP, identified in the human genome.

Reference AD, U.S. Patent 5,082,783 to Ernst, et al., relates to expression systems and recombinant DNA molecules that facilitate enhanced secretion of heterologous proteins by hosts, to hosts comprising such recombinant DNA molecules and to methods of producing desired proteins using such hosts.

Reference AE, U.S. Patent 5,223,408 to Goeddel, et al., relates to methods for producing variant non-membrane proteins having altered binding properties when compared to the wild-type protein.

Reference AF, U.S. Patent 5,242,822 to Marullo, et al., relates to a vector which can be replicated in cultures of unicellular organisms, this vector containing a gene coding for a eucaryotic protein having the biological activity of a

membrane receptor and interacting with a regulatory protein - called G protein - capable of binding molecules of guanosine triphosphate ("GTP").

Reference AG, U.S. Patent 5,244,805 to Miller, relates to classes of promoters that improve the expression of a heterologous gene in a baculovirus system.

Reference AP, Ginsberg, 1984, is disclosed at p. 1, lines 11-13, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference AQ, Grand, 1987, *Biochem. J.*, vol. 241, pp. 25-38, is disclosed at p. 1, lines 21-22, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference AR, Nevins, 1987, *Microbiol. Rev.*, vol. 51, pp. 419-430, is disclosed at p. 1, lines 23-24, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference AS, Ginsberg, et al., 1989, is disclosed at p. 1, lines 25-26, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference AT, Anderson, et al., 1985, *Cell*, vol. 43, pp. 215-222, is disclosed at p. 1, lines 27-28, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference BJ, Burgert, et al., 1985, *Cell*, vol. 41, pp. 987-997, is disclosed at p. 1, lines 28-29, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference BK, Burgert, et al., 1987, *EMBO J.*, vol. 6, pp. 2019-2026, is disclosed at p. 1, line 29, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference BL, Carlin, et al., 1989, *Cell*, vol. 57, pp. 135-144, is disclosed at p. 1, lines 29-30, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference BM, Gooding and Wold, 1990, *Crit. Rev. Immunol.*, vol. 10, pp. 53-71, is disclosed at p. 1, lines 30-31, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference BN, Gooding, et al., 1988, *Cell*, vol. 53, pp. 341-346, is disclosed at p. 1, lines 31-32, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference CD, Horton, et al., 1990, *J. Virol.*, vol. 64, pp. 1250-1255, is disclosed at p. 1, lines 32-33, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference CE, Tollefson, et al., 1991, *J. Virol.*, vol. 65, pp. 3095-3105, is disclosed at p. 1, lines 33-34, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference CF, Wold and Gooding, 1989, *Mol. Biol. Med.*, vol. 6, pp. 433-452, is disclosed at p. 1, lines 34-35, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference CG, Wold and Gooding, 1991, *Virology*, vol. 184, pp. 108, is disclosed at p. 1, lines 35-36, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference CH, Berkner, et al., 1984, *Nuc. Acids Res.*, vol. 12, pp. 1925-1941, is disclosed at p. 1, line 39, to p. 2, line 1, and at p. 2, lines 24-25, and at p. 3, lines 7-8, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference CX, Chanda, et al., 1990, *Virology*, vol. 175, pp. 535-547, is disclosed at p. 2, lines 1-2, and at p. 2, line 25, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference CY, Haj-Ahmad, et al., 1986, *J. Virol.*, vol. 57, pp. 267-274, is disclosed at p. 2, lines 2-3, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference CZ, Saito, et al., 1985, *J. Virol.*, vol. 54, pp. 711-719, is disclosed at p. 2, lines 3-4, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference DA, Ghosh-Choudhury, et al., 1987, *EMBO J.*, vol. 6, pp. 1733-1739, is disclosed at p. 2, lines 6-7, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference DB, Graham, et al., 1977, *J. Gen. Virol.*, vol. 36, pp. 59-72, is disclosed at p. 2, lines 12-13, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference DR, Graham, et al., 1992, Vaccines New Approaches to Immunological Problems, R. W. Ellis (Ed.), Butterworth-Heinemann, Boston, MA, pp. 364-390, is disclosed at p. 2, lines 16-18, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference DS, Dewar, et al., 1989, *J. Virol.*, vol. 63, pp. 129-136, is disclosed at p. 2, lines 25-26, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference DT, Graham, 1990, *Trends Biotechnol.*, vol. 8, pp. 85-87, is disclosed at p. 2, lines 26-27, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference DU, Johnson, et al., 1988, *Virology*, vol. 164, pp. 1-14, is disclosed at p. 2, lines 27-28, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference DV, Lubeck, et al., *Proc. Natl. Acad. Sci. USA*, vol. 86, pp. 6763-6767, is disclosed at p. 2, lines 28-29, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference EL, McDermott, et al., 1989, *Virology*, vol. 169, pp. 244-247, is disclosed at p. 2, lines 29-30, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference EM, Morin, et al., 1987, *Proc. Natl. Acad. Sci. USA*, vol. 84, pp. 4626-4630, is disclosed at p. 2, lines 30-31, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference EN, Prevec, et al., 1989, *J. Gen. Virol.*, vol. 70, pp. 429-434, is disclosed at p. 2, lines 31-32, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference EO, Prevec, et al., 1990, *J. Inf. Dis.*, vol. 161, pp. 27-30, is disclosed at p. 2, lines 32-33, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference EP, Schneider, et al., 1989, *J. Gen. Virol.*, vol. 70, pp. 417-427, is disclosed at p. 2, lines 33-34, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference FF, Vernon, et al., 1991, *J. Gen. Virol.*, vol. 72, pp. 1243-1251, is disclosed at p. 2, lines 34-35, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference FG, Yuasa, et al., 1991, *J. Gen. Virol.*, vol. 72, pp. 1927-1934, is disclosed at p. 2, lines 35-36, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference FH, Thummel, et al., 1981, *Cell*, vol. 23, pp. 825-836, is disclosed at p. 3, line 6, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference FI, Grunhaus, et al., 1992, *Seminars in Virology* 3, pp. 237-252, is disclosed at p. 3, lines 7-8, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference FJ, Herz, et al., 1993, *Proc. Natl. Acad. Sci. USA*, vol. 90, pp. 2812-2816, is disclosed at p. 3, lines 10-11, and p. 5, lines 6-9, of the above-identified patent application.



Reference FZ, Rosenfeld, et al., 1991, *Science*, vol. 252, pp. 431-434, is disclosed at p. 3, lines 11-12, and p. 5, lines 14-17, of the above-identified patent application.

Reference GA, Rosenfeld, et al., 1992, *Cell*, vol. 68, pp. 143-155, is disclosed at p. 3, lines 12-13, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference GB, Freidman, et al., 1986, *Mol. Cell. Biol.*, vol. 6, pp. 3791-3797, is disclosed at p. 3, lines 19-20, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference GC, Babiss, et al., 1986, *Mol. Cell. Biol.*, vol. 6, pp. 3798-3806, is disclosed at p. 3, lines 20-21, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference GD, Mittal, et al., 1993, *Virus Research*, vol. 28, pp. 67-90, is disclosed at p. 3, lines 23-24, and at p. 3, lines 26-27, of the above-identified patent application.

Reference GT, Gomez-Foix, et al., 1992, *J. Biol. Chemistry*, vol. 267(35), pp. 25129-25134, is disclosed at p. 4, lines 2-3, of the above-identified patent application.

Reference GU, Roessler, et al., 1993, *J. Clin. Invest.*, vol. 92, pp. 1085-1092, is disclosed at p. 4, line 19, of the above-identified patent application.

Reference GV, Yang, et al., 1993, *Proc. Natl. Acad. Sci. USA*, vol. 90, pp. 9480-9484, is disclosed at p. 4, lines 29-30, of the above-identified patent application.

Reference GW, Quantin, et al., 1992, *Proc. Natl. Acad. Sci. USA*, vol. 89, pp. 2581-2584, is disclosed at p. 5, lines 20-21, and at p. 8, lines 3-4, of the above-identified patent application.

Reference GX, Babich, et al., 1983, *Mol. Cell. Biol.*, vol. 3, pp. 1212-1221, is disclosed at p. 5, line 29, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference HN, Beltz, et al., 1979, *J. Mol. Biol.*, vol. 131, pp. 353-373, is disclosed at p. 5, line 30, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference HO, Schneider, et al., 1987, *Annu. Rev. Biochem.*, vol. 56, pp. 317-332, is disclosed at p. 5, lines 31-32, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference HP, Harrison, et al., 1977, *Virology*, vol. 77, pp. 319-329, is disclosed at p. 5, lines 34-35, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference HQ, Jones, et al., 1979, *Cell*, vol. 17, pp. 583-689, is disclosed at p. 5, line 35, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference HR, Mulligan, R. C., 1993, *Science*, vol. 260, pp. 926-932, is disclosed at p. 6, lines 8-9, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference IH, Straub, et al., 1990, *Proc. Natl. Acad. Sci. USA*, vol. 87, pp. 9514-9518, is disclosed at p. 6, lines 13-14, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference II, Yamada, et al., 1992, *Biochem. Biophys. Res. Commun.*, vol. 184, pp. 367-372, is disclosed at p. 6, lines 14-15, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference IJ, Zhao, et al., 1992, *Endocrinology*, vol. 130, pp. 3529-3536, is disclosed at p. 6, lines 15-16, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference IK, de la Pena, et al., 1992, *Biochem. J.*, vol. 284, pp. 891-899, is disclosed at p. 6, lines 16-17, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference IL, Dohlman, et al., 1991, *Annu. Rev. Biochem.*, vol. 60, pp. 653-688, is disclosed at p. 6, lines 19-20, of the above-identified patent application.

Reference JB, Gustafson, et al., 1987, *Proc. Natl. Acad. Sci. USA*, vol. 84, pp. 3122-3126, is disclosed at p. 7, lines 8-9, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference JC, Rindt, et al., 1993, *J. Biol. Chem.*, vol. 268, pp. 5332-5338, is disclosed at p. 7, lines 16-17, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference JD, Subramanian, et al., 1991, *J. Biol. Chem.*, vol. 266, pp. 24613-24620, is disclosed at p. 7, lines 17-18, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference JE, Kitsis, et al., 1991, *Proc. Natl., Acad. Sci. USA*, vol. 88, pp. 4138-4142, is disclosed at p. 7, lines 24-26, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference JF, Lin, et al., 1990, *Circulation*, vol. 82, pp. 2217-2221, is disclosed at p. 7, line 26, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference JV, Ascadi, et al., 1991, *The New Biologist*, vol. 3, pp. 71-81, is disclosed at p. 7, lines 27-28, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference JW, Kitsis, et al., 1993, In Methods in Molecular Genetics, K. W. Adolph (Ed.), Academic Press, Inc., New York, Vol. 1, pp. 374-392, is disclosed at p. 7, lines 31-33, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference JX, Kirshenbaum, et al., 1993, *J. Clin. Invest.*, vol. 92, pp. 381-387, is disclosed at p. 7, lines 35-36, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Reference JY, Stratford-Perricaudet, et al., 1992, *J. Clin. Invest.*, vol. 90, pp. 626-630, is disclosed at p. 8, lines 4-5, of the above-identified patent application. A copy of this reference will be forwarded to the PTO.

Respectfully submitted,

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